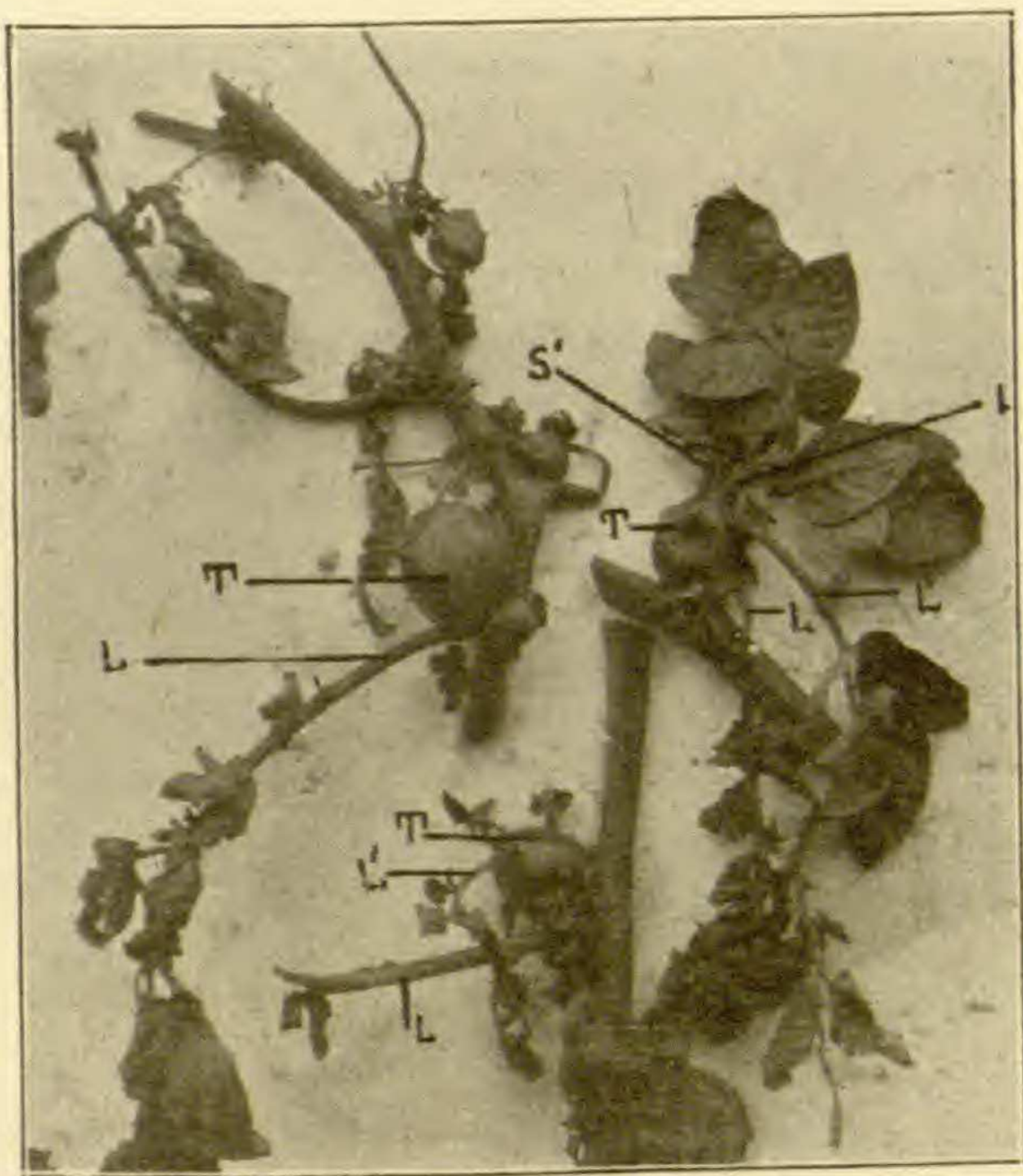


like those of *B. tripartitus*. On this account the specimens from the United States heretofore seen by me cannot possibly be identified with Mühlenberg's type in the Willdenow herbarium, but belong to another good species.

It would be of great phytogeographic interest if the botanists of the United States would observe, now in their herbaria and next season in the field, whether *B. connatus* really occurs there with warty four-awned fruits, as in Europe, or whether this plant is there found only with smooth two to three-awned fruits. Perhaps there can be found in some of the older herbaria Mühlenberg's types, which might show whether the fruits are smooth or warty, two- or four-awned. In any case I should be greatly obliged for information on this point.—C. WARNSTORF, *Neuruppin, Germany*.

AERIAL TUBERS OF SOLANUM TUBEROSUM.

IN December 1895, some interesting specimens of aerial tubers were found on *Solanum tuberosum* in the garden of the steward of the



Louisiana State University and Agricultural and Mechanical College, at Baton Rouge. My attention was called to them by Mr. Holmes,

the steward. The plant had no well developed underground tubers, but the stem above ground had developed on it upwards of fifty well formed tubers, varying in size from a half inch to two inches in diameter. Nor were they confined to the portion of the stem near the ground, but extended up the stem almost to the top. It is true the stem was not erect, but it was not more prostrate than others about it. The tubers were located in the axils of the normal leaves. In some instances there was only one tuber in the axil of the leaf, in others there were more, and in one case there were five. These tubers were of the shape and size of those ordinarily formed underground, but in many instances the leaf-scale of the normal potato was here developed into a large foliage leaf, which did not differ from the normal leaf of the stem. The tubers contained a large amount of chlorophyll, but were not as green as the stem. In most cases where leaves were developed on the tubers the bud in the axil of the leaf did not differ from the "eye" of the underground potato. In one or two instances, however, a branch was developed which, in turn, had three or four leaves. The cut shows one of these stems with its leaves, *L* marking the normal leaf, *T* the tuber in its axil, *L'* the leaf on the tuber. The stem to the right shows the secondary stem from the tuber, marked *S'*.

The plant grew in the open garden, and, so far as light and moisture were concerned, was not different from hundreds of others that surrounded it. The tubers were preserved and planted in the following spring, but they were very late in sprouting, and some of them rotted without sprouting. Those that produced plants were caught by the hot dry summer, and were attacked by blight before they came to maturity. The plants did not look different from those produced by the ordinary tubers.

Copies of the accompanying photograph were sent to several botanists, who regarded this as an unusual occurrence, though several had seen something like it before. After dismissing the subject for nearly two years, I again came across the photographs, and decided the matter was of sufficient interest to be placed upon record.—W. R. DODSON, *Baton Rouge, La.*